

**Portland Harbor Superfund Site
Feasibility Study
Section 1 – CAG Presentation September 10, 2014**

Source Control

DeFur comment/question	Discussion	Location of information in revised RI or FS
There are still current sources of contamination to the Willamette River and control of these must be reached before beginning any cleanup remedies at the downstream Portland Harbor site. A time-specific plan of action regarding these sources needs to be established; it should be open to public comment.	The Oregon Department of Environmental Quality will complete its Source Control Report later in 2014 – it will be available for public review	
A USGS report, “Reconnaissance of Contaminants in Selected Wastewater-Treatment-Plant Effluent and Stormwater Runoff Entering the Columbia River, Columbia River Basin, Washington and Oregon, 2008-10” was released in April 2012 (Morace 2012). The report looks at wastewater treatment plant effluent and stormwater runoff samples taken from nine cities along the Columbia River basin, including the Willamette River. The samples were taken from 2008 to 2010, but are not referenced by the LWG in the most recent Draft Feasibility Study.	This report is not a part of the CERCLA process, it is used for NPDES programs and is not references in the PH RI/FS	

Distribution of Contaminants/ River Characteristics

DeFur comment/question	Discussion	Location of information in revised RI or FS
<p>Section 1.0 (Introduction) states that, “The exact boundaries of the [Portland Harbor] Site have not yet been defined by EPA, which will do so in the Proposed Plan.”</p> <p>Why are the exact boundaries not determined yet? What is keeping this delineation from occurring at this stage?</p>	<p>The site boundaries will be determined at the time of the Record of Decision.</p>	
<p>Section 2.1.1 (Hydrology) states that, “River stage and currents at the Site are influenced by hydrologic conditions in both the Willamette and Columbia Rivers, and are further affected by the operations of federal and non-federal dams along these two rivers, as well as tidal stages of the Pacific Ocean, which causes tidal fluctuations of up to a maximum of 3 feet per day throughout the Site.”</p> <p>Relative to the tide difference, there is more than a 3 foot tidal fluctuation. Is the three feet only referencing the influence of the ocean tides on the fluctuations seen at Portland Harbor?</p>		
<p>Section 2.1.1 states that, “Upstream flooding is largely controlled by 13 major tributary reservoirs (Uhrich and Wentz 1999). These 13 federal reservoirs on the Willamette River and its tributaries have a combined storage capacity of over 1.6 million acre-feet. These reservoirs reduce the river flow during the winter snow and rain events by storing water.” As these several reservoirs were unable to keep the water contained during the flooding event of 1996, have the limits of these reservoirs been thoroughly examined in regards to the models used to evaluate the several alternatives? Are there any future plans for additional reservoirs either during or after the Harbor cleanup?</p>		

Distribution of Contaminants/ River Characteristics - continued

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Section 2.2.2 (Surface Water) states that, “Concentrations of total DDx in surface water were generally highest during high-flow conditions and lowest during stormwater influenced conditions. Concentrations of dioxins/furans in surface water were generally lowest during high-flow conditions and highest during low-flow and stormwater influenced conditions.” When is there an occurrence of “stormwater influenced conditions” that are not also a high flow event? Please give an example for the reader.		
Section 2, Figures 2.4-1a-d cite that river dependent uses cover an estimated 72% of the occupied riverfront. The figures indicate that river-dependent cover is uniform throughout the four sections. Please describe any estimation methods used here, as it is highly unlikely that these percentages are exactly the same throughout.		

Sediment

DeFur comment/question	Discussion	Location of information in revised RI or FS
None of the alternatives achieve PCB remediation goals based on human health protection from consumption of resident fish because of technical infeasibility. How has this infeasibility been determined? What studies indicate that PCB remediation is infeasible? What agencies have been involved in its approval?		
Section 2.2.1 (Sediment) states that: "Sediment samples were collected throughout the Study Area—but biased toward areas of known or suspected contamination based on existing information—with additional sampling upstream and downstream of the Study Area." How far up and downstream? What was the reasoning for the distance sampled up or downriver? Was there seasonal sampling completed up and downstream of the Harbor?		
Section 2.2.1 also states: "In addition to sediment chemistry, toxicity testing (sediment bioassays) was conducted on more than 200 surface sediment samples collected by the LWG." Were sediment toxicity tests also run on sediments up and downstream of the site as well?		
Section 2.2.1 also states: "The concentrations of total DDx in surface sediments are greater in the Study Area than those in the upriver, downtown, Multnomah Channel, and downstream reaches." If surface sediments are higher than elsewhere, than not all the sources are historical, and simple burial will not achieve cleanup objectives.		

Risk

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<p>Multiple stressors are present here in the Portland Harbor system, both in terms of human health as well as ecological risks. Official and formal methods for addressing multiple stressors are limited to using toxic equivalency values for a few groups of organic chemicals (i.e. dioxin-like chemicals). These methods do not even consider chemicals acting on the same health effect if in different chemical groups (i.e mercury and PCBs both impair neurodevelopment) In truth, both ecosystems and human health are at risk from multiple chemicals and the consequences of cumulative impacts. Ecologically, systems that are already under stress will respond differently than unstressed systems; human communities are similar. These conditions are unaddressed - the FS will be based on underestimated risks.</p>		

Style

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The length of the FS precludes most of the public from reading it in its entirety. Therefore, the summaries found before each section should not use abbreviations, but spell out each term on first reference throughout the summaries. Also, much of the sections have information that is repetitive or not entirely relevant. An FS can be both thorough and concise.		
Rather than listing and discussing several times in several sections the various remediation technologies, the information found in these sections should be summarized and combined and placed in one section. This mitigates repetitiveness and confusion from the report.		
Section 2.2 (Chemical System) states that, “for some human health exposure scenarios, risk from PAHs was evaluated using the combined toxicity of all carcinogenic PAHs (cPAHs).” The explanation of BaP and BaPEq and their calculations are footnotes that should be brought up into the main text, as these terms are used often throughout the document.		